



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Milan Kokta, et al.  
Title: SPINEL ARTICLES AND METHODS FOR FORMING SAME  
Application No.: 10/669,135 Filed: September 23, 2003  
Examiner: Felisa Carla Hiteshew Group Art Unit: 1765  
Atty. Docket No.: 1035-BI4307

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- ☒ Form(s) PTO/SB/08A and/or PTO/SB/08B or PTO/1449  
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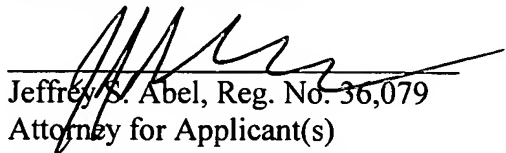
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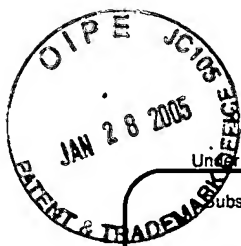
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Respectfully submitted,

  
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PTO/SB/08A (08-03)

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Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1 of 3

**Complete if Known**

Application Number	10/669,135
Filing Date	September 23, 2003
First Named Inventor	Milan R. Kokta
Art Unit	1765
Examiner Name	Felisa Carla Hiteshew
Attorney Docket Number	1035-BI4307

**U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	AA	US- 4,963,520	10/16/1990	Yoo, et al.	
	AB	US- 5,982,796	11/09/1999	Kokta, et al.	
	AC	US- 5,654,973	08/05/1997	Stultz, et al.	
	AD	US- 5,557,624	09/17/1996	Stultz, et al.	
	AE	US- 6,366,596	04/02/2002	Yin, et al.	
	AF	US- 6,023,479	02/08/2000	Thony, et al.	
	AG	US-			
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**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
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Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		<b>Complete if Known</b>	
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		Examiner Name	Felisa Carla Hiteshew
Sheet 2	of 3	Attorney Docket Number	1035-BI4307

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	BA	Efimov, A.N., et al., "Onan Unusual Azimuthal Orientation Relationship in the System Gallium Nitride Layer on Spinel Substrate", CRYSTALLOGRAPHY REPORTS, 45(2): 312-317 (2000).	
	BB	Sun C.J., et al., "Mg-doped green light emitting diodes over cubic (1 1 1) MgAl <sub>2</sub> O <sub>4</sub> substrate", APP. PHYS. LETT. 72(19): 2361-2363 (1998).	
	BC	Efimov, A.N., et al., "Symmetry constraints and epitaxial growth on non-isomorphic substrate", THIN SOLID FILMS 260: 111-117 (1995).	
	BD	George, T., et al., "Novel symmetry in the growth of gallium nitride on magnesium aluminate substrates", APPL. PHYS. LETT. 68(3): 337-339 (1996).	
	BE	Sun C.J., et al., "Deposition of high quality wurtzite GaN films over cubic (1 1 1) MgAl <sub>2</sub> O <sub>4</sub> substrates using low pressure and metalorganic chemical vapor deposition," APPL. PHYS. LETT. 68(8): 1129-1131 (1996).	
	BF	Nakamura, S., et al., "Characteristics of InGaN multi-quantum-well-structure laser diodes," APPL. PHYS. LETT. 68(23): 3269-3271 (1996).	
	BG	Khan, M.A., et al., "Cleaved cavity optically pumped InGaN-GaN laser grown on spinel substrates," APPL. PHYS. LETT. 69(16): 2418-2420 (1996).	
	BH	Tempel, A., et al., "Nachweis von Stapelfehlern in GaN-Exitaxieschichten mittels Elektronenbeugung," KRISTALL UND TECHNIK 10(7): 741-746 (1975).	
	BI	Tempel, A., et al., "Zur Epitaxie von Galliumnitride auf nichtstoechiometrischem Spinell im System GaC <sub>1</sub> /NH <sub>3</sub> /He," KRISTALL UND TECHNIK 10(7): 747-758 (1975)	
	BJ	K.V. Yumashev, "Saturable absorber Co <sup>2+</sup> : MgAl <sub>2</sub> O <sub>3</sub> crystal for Q switching of 1.34-um Nd <sup>3+</sup> : YAlO <sub>3</sub> and 1.54-um Er <sup>3+</sup> : glass lasers," APPLIED OPTICS 38(30): 6343-6346 (1999).	

Examiner Signature	Date Considered
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Sheet	3	of	3	Attorney Docket Number	1035-BI4307

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	CA	Camargo, M.B., et al., "Co2+ Y3Sc2Ga3O12 (YSGG) Passive Q-Switch for Infrared Erbium Lasers," submitted to LEOS in 1994.	
	CB	Mikhailov, V.P., et al., "Passive Q-switch performance at 1.3u (1.5u) and nonlinear spectroscopy of Co2+: MgAl2O4 and Co2+: LaMgAl11O9 crystals," OSA TOPS VOL. 26 Advanced Solid-State Lasers, pp. 317-324 (1999).	
	CC	Stulz, R.D., et al., "Divalent Uranium and Cobalt Saturable Absorber Q-Switches at 1.5um," OSA Proceedings on Advanced Solid-State Lasers, 24:460-464 (1995).	
	CD	Birnbaum, M., et al., "Co2+: ZnSe Saturable Absorber Q-Switch for the 1.54 um Er3+: Yb3+: Glass Laser," OSA TOPS Vol. 10 Advanced Solid State Lasers, pp. 148-151 (1997).	
	CE	Machida, H., et al., "difficulties encountered during the Czochralski growth of TiO2 single crystals," JOURNAL OF CRYSTAL GROWTH, 112: 835-837 (1997).	
	CF	Camargo, M.B., et al., "Broad-band 1.54 um Saturable Absorber Q-switch with Co2+, " submitted to ASSL in 1995.	
	CG	Yumashev, K.V., et al., "Nonlinear spectroscopy and passive Q-switching operation of a Co2+: LaMgAl11O19 crystal," J. OPT. SOC. AM. B., 16(12): 2189-2194 (1999).	
	CH		
	CI		
	CJ		

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